

TWN3 Mifare® NFC

13.56MHz Contactless Reader/Writer



The TWN3 Mifare NFC transponder reader is designed for easy integration into various applications.

The device supports either USB or RS232 communication just in dependence on the connection cable and is available as ready-to-connect desktop reader in a slim line black or white housing or as a OEM board (PCB) without housing for direct integration into embedded applications.

Readers can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more.

The Secure Access Module (SAM) is supported for enhanced security and cryptographic performance. This enables the application to perform secure transactions, e.g. payment terminals etc.

Technical Data	
Housing	Material ABS UL94-V0, colour black or white
Frequency	13.56 MHz
Dimensions	Desktop Reader: 88mm x 56mm x 18mm / 3.5inch x 2.2inch x 0.7inch OEM Board: 76mm x 49mm x 14mm / 3.0inch x 1.9inch x 0.6inch
Power Supply	5V ± 10% via communication cable (USB); serial version requires external power supply
Supply Current	65mA typ. (USB, normal operation); 120mA peak
Temperature Range	Storage: -45°C up to +85°C (-49°F up to 185°F) Operating: -25°C up to +80°C (-13°F up to 176°F)
Antenna	PCB Aircoil
R/W Distance	up to 100 mm / 4 inch (depending on transponder)
Host Interfaces	USB, RS232. The OEM board supports both and an additional serial TTL interface via a separate connector
OS Support	Windows XP, Windows Vista, Windows 7 (32/64 bit) and Linux
Communication Parameters	USB: Full speed (12 MBit) RS232: Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600 Parity: none, even, odd
Modes of Operation	USB keyboard emulation USB virtual COM port (bi-directional communication) Direct access to built-in RFID module (transparent mode)
Special Features	Powerful scripting language
Supported Transponders	<ul style="list-style-type: none"> • ISO14443A Mifare Classic 1k & 4k, DESFire EV1, Mini, Plus S&X, my-d move, SmartMX, Ultralight, Ultralight C SLE44R35, SLE66Rxx • ISO14443B Calypso, CEPAS, Moneo, SRI512, SRT512, SRI4K, SRIX4K • Sony FeliCa¹⁾ • ISO18092 / Full NFC Active & Passive Mode, P2P, Target, NFC ForumTag Type 1-4 • Legic Advant¹⁾
Certifications	CE, R&TTE, RoHS, FCC, IC, ACA, VCCI
Weight	Approximately 15g (without housing)
Order Code	
OEM board	ART13791
Desktop reader	
USB black	ART13529
USB white	ART13607
Serial black	ART13861
Serial white	ART13862

¹⁾ UID only

Accessories				
Order Code	ART13512	ART11493	ART12240	ART13456
Description	Snap-in holder with double sided adhesive pads for easy fixation of TWN3 desktop readers 	USB Type A Cable for TWN3 OEM PCB, 2.0m	RS232 DSUB 9 DC cable for TWN3 OEM PCB, 2.0m	5V Power Supply, 6W wall adapter for TWN3 (RS232)

Drawing/Pin Out
Refer to document DS_TWN3 Reader Family Pinouts

Elatec reserves the right to change any information or data in this document without prior notice. The distribution and the update of this document is not controlled. Elatec declines all responsibility for the use of product with any other specifications but the ones mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification © 2011 Elatec GmbH – V2.2 – 01/2012